

SEQUENCE LISTING

<110> Altmann, Friedrich
 <120> Fucosyl Transferase Gene
 <130> 030560-057
 <140> US 09/913,858
 <141> 2001-08-20
 <150> PCT/AT00/00040
 <151> 2000-02-17
 <150> AT A 270/99
 <151> 1999-02-18
 <160> 17
 <170> PatentIn version 3.1
 <210> 1
 <211> 2198
 <212> DNA
 <213> Unknown Organism
 <220>
 <223> Description of Unknown Organism:plant

<400> 1
 actaactcaa acgctgcatt ttcttttttc tttcagggaa ccatccaccc ataacaacaa 60
 aaaaaacaac agcaagctgt gtttttttta tctgtctttt tctttaaaca agcaccacca 120
 tcatggaatc gtgctcataa cgcgaaaatt ttccatttcc ctttgatttt tagtttattt 180
 tgcggaattg gcagttgggg ggcgaattga atgatgggtc tgttgacgaa tcttcgaggc 240
 tcgagaacag atggtgcccc acaagacagc ttaccggtt tggctccggg aggcaaccca 300
 aagaggaaat ggagcaatct aatgcctctt gttgttgccc ttgtggtcat cgcggagatc 360
 gcgtttctgg gtaggttgga tatggccaaa aacgcgcga tgggtgactc cctcgtgac 420
 ttcttctacc gctctcgagc ggtcgttgaa ggtgacgatt tgggggtggg tttggtggct 480
 tctgatcgga attctgaatc gtatagttgt gaggaatggt tggagagggg ggatgctgtc 540
 acgtattcga ggggcttttc caaagagcct atttttgttt ctggagctga tcaggagtgg 600
 aagtcgtgtt cgggttgatg taaatttggg tttagtgggg atagaaagcc agatgccgca 660
 tttgggttac ctcaaccaag tggaaacagc agcattctgc gatcaatgga atcagcagaa 720
 tactatgctg agaacaatat tgcctatggc agacggaggg gatataacat cgtaattgaca 780
 accagtctat cttcggatgt tctgtttgga tatttttcat gggctgagta tgatatgatg 840
 gcaccagtgc agccgaaaac tgaagctgct cttgcagctg ctttcatttc caattgtggt 900
 gctcgaaatt tccggttgca agctcttgag gcccttgaaa aatcaaacat caaaattgat 960
 tcttatggtg gttgtcacag gaaccgatg ggaagagtga acaaagtga agccctgaag 1020
 cactacaaat ttagcttagc gtttgaaaat tcgaatgagg aagattatgt aactgaaaaa 1080
 ttcttccaat cccttggttg tggaaactgtc cctgtggttg ttggtgctcc aaatattcag 1140
 gactttgtct cttctcctgg ttcaatttta catattaaag agatagagga tgttgagtct 1200
 gttgcaaaga ccatgagata tctagcagaa aatccogaag catataatca atcattgagg 1260
 tggaaagtat aggggtccatc tgactccttc aaggcccttg tggatatggc agctgtgcat 1320
 tcatcgtgcc gtcctttgcat tcacttggcc acagtgaag gagagaagga agaaaataat 1380
 ccaagccta agagagctc ttgcaagtgc actagagggc cagaaaccgt atatcatatc 1440
 tatgtcagag aaaggggaag gtttgagatg gagtccattt acctgaggtc tagcaattta 1500

RECEIVED

JAN 07 2002

TECH CENTER 1600/2900

```

actctgaatg ctgtgaaggc tgctgttggt ttgaagttca catccctgaa tcttgtgcct 1560
gtatggaaga ctgaaaggcc tgaagttata agagggggga gtgctttaaa actctacaaa 1620
atatacccaa ttggcttgac acagagacaa gctctttata ccttcagctt caaagggtgat 1680
gctgatttca ggagtcactt ggagaacaat ccttgtgcca agtttgaagt catttttgtg 1740
tagcatgctc taaatggtac ctctgctcta cctgaattag cttcacttag ctgagcacta 1800
gctagagttt taggaatgag tatggcagtg aatatggcat ggctttattt atgcctagtt 1860
tcttggccaa ctcatgatg ttttgtataa gacatcacac ttttaattta aacttgtttc 1920
tgtagaagtg caaatccata tttaatgctt agtttttagtg ctcttatctg atcatctaga 1980
agtcacagtt cttgtatatt gtgagtgaat actgaaatct aatagaagga tcagatgttt 2040
cactcaagac acattattac ttcattgttg ttgatgatc tcgagctttt ttagtgtctg 2100
gaactgtccc tgtggtttga gcacctgtta ttgcttcagt gttactgtcc agtggttatt 2160
gtttttgacc tctaaaaaaa aaaaaaaaaa aaaaaaaa 2198

```

```

<210> 2
<211> 510-
<212> PRT
<213> Unknown Organism

```

```

<220>
<223> Description of Unknown Organism:plant

```

```

<400> 2
Met Met Gly Leu Leu Thr Asn Leu Arg Gly Ser Arg Thr Asp Gly Ala
  1              5              10              15

Gln Gln Asp Ser Leu Pro Val Leu Ala Pro Gly Gly Asn Pro Lys Arg
      20              25              30

Lys Trp Ser Asn Leu Met Pro Leu Val Val Ala Leu Val Val Ile Ala
      35              40              45

Glu Ile Ala Phe Leu Gly Arg Leu Asp Met Ala Lys Asn Ala Ala Met
      50              55              60

Val Asp Ser Leu Ala Asp Phe Phe Tyr Arg Ser Arg Ala Val Val Glu
      65              70              75              80

Gly Asp Asp Leu Gly Leu Gly Leu Val Ala Ser Asp Arg Asn Ser Glu
      85              90              95

Ser Tyr Ser Cys Glu Glu Trp Leu Glu Arg Glu Asp Ala Val Thr Tyr
      100             105             110

Ser Arg Gly Phe Ser Lys Glu Pro Ile Phe Val Ser Gly Ala Asp Gln
      115             120             125

Glu Trp Lys Ser Cys Ser Val Gly Cys Lys Phe Gly Phe Ser Gly Asp
      130             135             140

Arg Lys Pro Asp Ala Ala Phe Gly Leu Pro Gln Pro Ser Gly Thr Ala
      145             150             155             160

Ser Ile Leu Arg Ser Met Glu Ser Ala Glu Tyr Tyr Ala Glu Asn Asn
      165             170             175

Ile Ala Met Ala Arg Arg Arg Gly Tyr Asn Ile Val Met Thr Thr Ser
      180             185             190

```

Leu Ser Ser Asp Val Pro Val Gly Tyr Phe Ser Trp Ala Glu Tyr Asp
 195 200 205
 Met Met Ala Pro Val Gln Pro Lys Thr Glu Ala Ala Leu Ala Ala Ala
 210 215 220
 Phe Ile Ser Asn Cys Gly Ala Arg Asn Phe Arg Leu Gln Ala Leu Glu
 225 230 235 240
 Ala Leu Glu Lys Ser Asn Ile Lys Ile Asp Ser Tyr Gly Gly Cys His
 245 250 255
 Arg Asn Arg Asp Gly Arg Val Asn Lys Val Glu Ala Leu Lys His Tyr
 260 265 270
 Lys Phe Ser Leu Ala Phe Glu Asn Ser Asn Glu Glu Asp Tyr Val Thr
 275 280 285
 Glu Lys Phe Phe Gln Ser Leu Val Ala Gly Thr Val Pro Val Val Val
 290 295 300
 Gly Ala Pro Asn Ile Gln Asp Phe Ala Pro Ser Pro Gly Ser Ile Leu
 305 310 315 320
 His Ile Lys Glu Ile Glu Asp Val Glu Ser Val Ala Lys Thr Met Arg
 325 330 335
 Tyr Leu Ala Glu Asn Pro Glu Ala Tyr Asn Gln Ser Leu Arg Trp Lys
 340 345 350
 Tyr Glu Gly Pro Ser Asp Ser Phe Lys Ala Leu Val Asp Met Ala Ala
 355 360 365
 Val His Ser Ser Cys Arg Leu Cys Ile His Leu Ala Thr Val Ser Arg
 370 375 380
 Glu Lys Glu Glu Asn Asn Pro Ser Leu Lys Arg Arg Pro Cys Lys Cys
 385 390 395 400
 Thr Arg Gly Pro Glu Thr Val Tyr His Ile Tyr Val Arg Glu Arg Gly
 405 410 415
 Arg Phe Glu Met Glu Ser Ile Tyr Leu Arg Ser Ser Asn Leu Thr Leu
 420 425 430
 Asn Ala Val Lys Ala Ala Val Val Leu Lys Phe Thr Ser Leu Asn Leu
 435 440 445
 Val Pro Val Trp Lys Thr Glu Arg Pro Glu Val Ile Arg Gly Gly Ser
 450 455 460
 Ala Leu Lys Leu Tyr Lys Ile Tyr Pro Ile Gly Leu Thr Gln Arg Gln
 465 470 475 480
 Ala Leu Tyr Thr Phe Ser Phe Lys Gly Asp Ala Asp Phe Arg Ser His
 485 490 495

Leu Glu Asn Asn Pro Cys Ala Lys Phe Glu Val Ile Phe Val
 500 505 510

<210> 3
 <211> 105
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:cDNA

<400> 3
 gaagccctga agcactacaa atttagotta gcgtttgaaa attcgaatga ggaagattat 60
 gtaactgaaa aattcttcca atcccttggt- gctggaactg tccct. 105

<210> 4
 <211> 35
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:peptide

<400> 4
 Glu Ala Leu Lys His Tyr Lys Phe Ser Leu Ala Phe Glu Asn Ser Asn
 1 5 10 15

Glu Glu Asp Tyr Val Thr Glu Lys Phe Phe Gln Ser Leu Val Ala Gly
 20 25 30

Thr Val Pro
 35

<210> 5
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:peptide

<400> 5
 Lys Pro Asp Ala Xaa Phe Gly Leu Pro Gln Pro Ser Thr Ala Ser
 1 5 10 15

<210> 6
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:peptide

<400> 6

Pro Glu Thr Val Tyr His Ile Tyr Val Arg
 1 5 10

<210> 7
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:peptide

<400> 7
 Met Glu Ser Ala Glu Tyr Tyr Ala Glu Asn Asn Ile Ala
 1 5 10

<210> 8
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:peptide

<400> 8
 Gly Arg Phe Glu Met Glu Ser Ile Tyr Leu
 1 5 10

<210> 9
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:DNA

<220>
 <221> misc_feature
 <222> (3)..(15)
 <223> n = any nucleotide

<400> 9
 gcngartayt aygcngaraa yaayathgc

29

<210> 10
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:DNA

<220>
 <221> misc_feature
 <222> (14)..(17)

<223> n = any nucleotide

<400> 10

crtadatrtg rtanacngty tc

22

<210> 11

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:DNA

<220>

<221> misc_feature

<222> (6)..(6)

<223> n = any nucleotide

<400> 11

tadatnswyt ccatytcraa

20

<210> 12

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:DNA

<400> 12

ctggaactgt ccctgtggtt

20

<210> 13

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:DNA

<400> 13

agtgcactag agggccagaa

20

<210> 14

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:DNA

<400> 14

ttcgagcacc acaattggaa at

22

<210> 15

<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:DNA

<400> 15
gaatgcaaag acggcacgat gaat 24

<210> 16
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:DNA

<400> 16
cggcgatcc gcaattgaat gatg 24

<210> 17
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:DNA

<400> 17
ccggctgcag taccatttag cgcac 25